

Amendments to the Specification

Please insert the following paragraph at page 1, line 2:

--RELATED APPLICATIONS

This application is a continuation of, and claims priority under 35 U.S.C. § 120 to, U.S. Application 09/724,524 filed November 27, 2000, which is a continuation of, and claims priority under 35 U.S.C. § 120 to, U.S. Application 09/156,923 filed September 18, 1998, issued as U.S. 6,153,189, which is a continuation of, and claims priority under 35 U.S.C. § 120 to, U.S. Application 08/359,705 filed December 20, 1994, issued as U.S. 5,844,092, which is a continuation-in-part of, and claims priority under 35 U.S.C. § 120 to, U.S. Application 08/286,846 filed August 5, 1994, issued U.S. 5,877,016, which is a continuation-in-part of, and claims priority under 35 U.S.C. § 120 to, U.S. Application 08/215,139 filed March 18, 1994, now abandoned.--

Please amend the paragraph beginning on page 11, line 3 as follows:

--**Figure 1A and 1B** shows the nucleotide sequence (SEQ. ID. NO: 1) and deduced amino acid sequence (SEQ. ID. NO: 2) of human trkB receptor. A) Figure 1A: The sequence of tyrosine kinase domain-containing trkB is shown (SEQ. ID. NO: 1) with potential N-linked glycosylation sites boxed, predicted transmembrane domain underlined, and tyrosine kinase domain flanked by arrows. The site of the splice giving rise to the truncated form is indicated by a single vertical line. B) Figure 1B: The sequence (SEQ. ID. NO: 40) of the alternately spliced truncated intracellular domain is shown. The amino acid sequence and the nucleotide sequence of the truncated form of human trkB receptor are attached as disclosed in SEQ. ID. NOS: 6_4 and 7_3, respectively.--

Please amend the paragraph beginning on page 11, line 15 as follows:

--**Figure 2A and 2B** shows the nucleotide sequence (SEQ. ID. NO: 5) and the amino acid sequence (SEQ. ID. NO: 6) of human trkC receptor. Figure 2A) The sequence of tyrosine

kinase containing trkC is shown (SEQ. ID. NO: 2) with potential N-linked glycosylation sites boxed, predicted transmembrane domain underlined, and tyrosine kinase domain flanked by arrows. The site of the splice giving rise to the truncated form is indicated by a single vertical line. The sequence of the potential inserts in the extracellular and tyrosine kinase domains are flanked by brackets. Figure 2B) The sequence (SEQ. ID. NO: 41) of the alternately spliced truncated intracellular domain is shown. The amino acid sequence and the nucleotide sequence of the truncated human trkC receptor are attached as disclosed in SEQ. ID NOS.: 4 and 5 8 and 7.--

Please amend the paragraph beginning on page 12, line 4 as follows:

--**Figure 4. Summary of the splice forms seen in human and other mammalian trks.** Shown are schematic representations of the forms of the various trks arising from alternate splicing. Domains are after Schneider and Schweiger, supra. Data for is redrawn from the literature rat trkA (Meakin, *et al.*, Proc. Natl. Acad. Sci. USA 89, 2374-2378 [1992], Barker *et al.*, J. Biol. Chem. 268, 15150-15157 [1993]), rat and mouse trkB (Klein, *et al.*, EMBO J. 8, 3701-3709 [1989]; Klein *et al.*, Cell 61, 647-656 [1990], Middlemas *et al.*, Mol. Cell. Biol. 11, 143-153 [1991]) and rat and pig trkC (Lamballe, *et al.*, Cell 66, 967-979 [1991]; Valenzuela *et al.*, Neuron 10, 963-974 [1993]; Tsoufas, *et al.*, Neuron 10, 975-990 [1993]). Alternate forms of truncated rat trkC described by Valenzuela *et al.*, supra are omitted for clarity. The triangle in the trkA extracellular region represents the optionally present peptide Ser-Pro-Ser-Arg-Trp (SEQ ID NO: 39) as described in the text. The left-most vertically oriented triangle in trkC extracellular region (shown with the upper portion darkened) represents the optionally present 9 amino acid peptide ESTDNFILF (SEQ ID NO:36) as described in the text. The narrow, vertically oriented triangle in the human trkC tyrosine kinase domain (smaller in size than the triangle to its left, and not darkened) represents the optionally present 14 amino acid peptide LFNPSGNFCIWCE (SEQ ID NO: 37). The narrower of the two triangles in the non-human trkC tyrosine kinase domain also represents the optionally present 14 amino acid peptide LFNPSGNFCIWCE (SEQ ID NO: 37), while the wider triangle in non-human trkC tyrosine kinase domain represents the optionally present 25 or 39 amino acid peptides.--

Please amend the paragraph beginning on page 15, line 17 as follows:

--Comparison of the amino acid sequences of full length human trkA, trkB and trkC receptors. The consensus sequences are boxed; the boundaries of the various domains are marked by vertical lines (see SEQ ID NOS: ~~3, 1 and 2~~ 9, 2 and 6).--

Please amend the paragraph beginning on page 98, line 16 as follows:

--In the extracellular domain of human trkC, there was a possible deletion of nine amino acids compared to rat and pig trkC at a site near to that where the extracellular insert was described in rat and human trkA (Barker *et al.*, J. Biol. Chem. 268, 1510-15157 [1993]; Figure 2). PCR analysis of this region in human trkC showed only two bands, corresponding in length to that expected for the insert-containing and insert-deleted forms. PCR analysis of this region in human trkB showed no detectable length polymorphisms, but amplification using trkA specific primers did show two distinct bands which were cloned and sequenced. The potential nucleotide insert was TCTCCTTCTGCCGGTGG (SEQ. ID. NO: 5 38) at position 1297 coding for the identical peptide insert (SEQ. ID. NO: 39) previously described in rat and human trkA (Barker, *et al.*, supra).--

Please replace page 118 with the enclosed replacement page 118, captioned "**REPLACEMENT SHEET.**"

Please amend the specification by entering the enclosed Sequence Listing following the Abstract on page 120.